



**QUEEN'S
UNIVERSITY
BELFAST**

The machinist landscape

Keeffe, G. (Author), & Dring, M. (Author). (2012). The machinist landscape: Land Art Generator Initiative (Competition). Design <http://landartgenerator.org/LAGI-2012/mach1n1c/>

Document Version:

Early version, also known as pre-print

Queen's University Belfast - Research Portal:

[Link to publication record in Queen's University Belfast Research Portal](#)

General rights

Copyright for the publications made accessible via the Queen's University Belfast Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The Research Portal is Queen's institutional repository that provides access to Queen's research output. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact openaccess@qub.ac.uk.

the machinist landscape

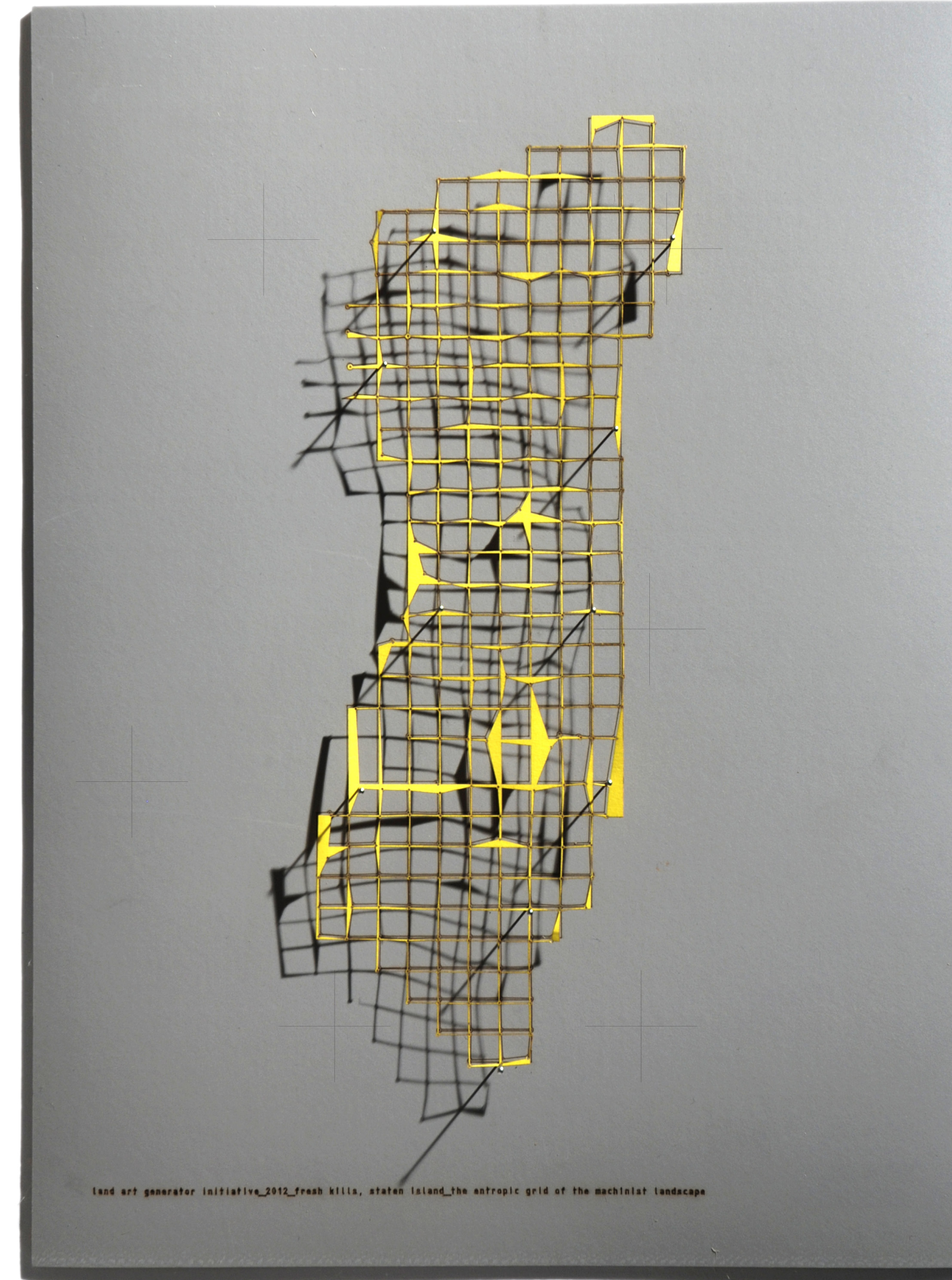
Between design and ground there are variances, deviations and gaps. These exist as a physical interstice between what is conceptualised and what is realised; and they reveal moments in the design process that resist the reconciliation of man and environment.

The Machinist Landscape maps out the significance of these variances, exploiting their potential and in doing so proposes that they can reveal the complexity of relationships between consumption and remediation, design and nature.



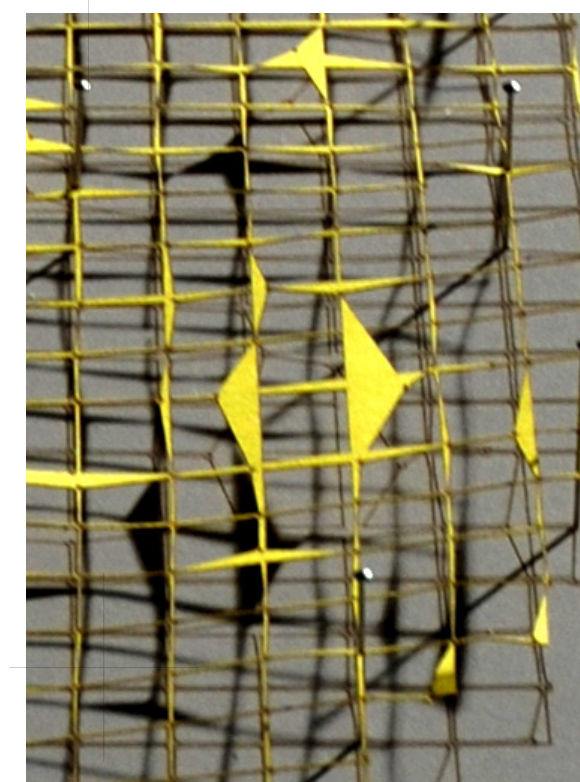
The two linoleum works presented here relate both to context and concept. Travis, to the north west of the site, was established as a worker settlement called Linoleumville, accomodating employees of the American Linoleum Company between 1872 – 1928. As an inherently environmentally friendly material, linoleum is at once solid and plastic in the sense that it offers a durable yet maleable surface for creative expression. The sketch above explores the creative and practical implementation of the 'entropic grid', represented in abstract terms through the linoleum works.

YEAR A



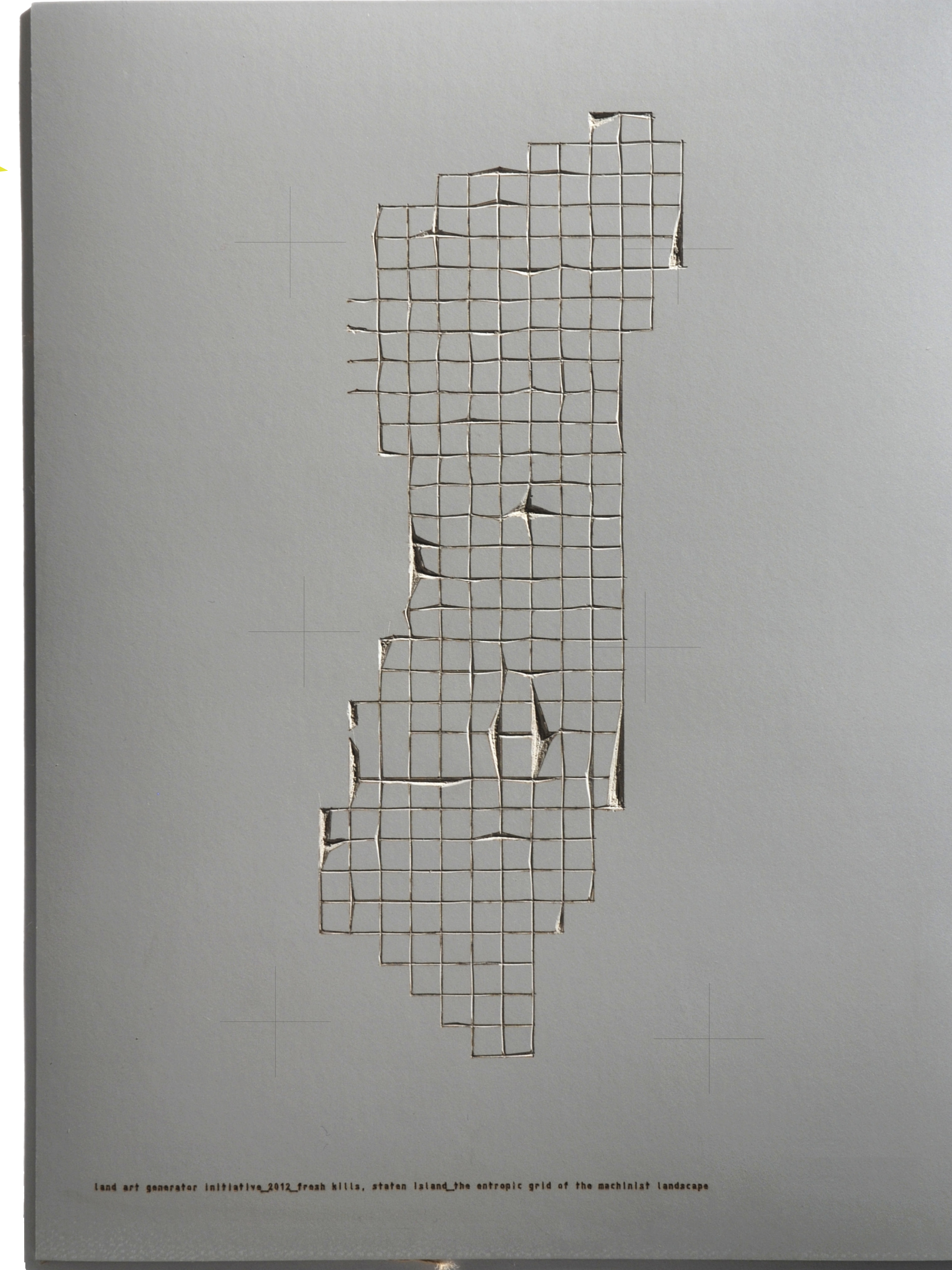
creating spaces

A new, additive layer of organic growth is superimposed over the landfill cap, the geometry of the 'entropic grid' given by the variance between the intended and realised grid of landfill gas wellheads. The project is as much about the positive addition of the 'entropic grid' as the spaces it creates in between. As inhabitants move across the site, spatial definition is given through short rotation coppice, event glades and coppice pole structures supporting photo-voltaic panels.



the additive layer

YEAR Z

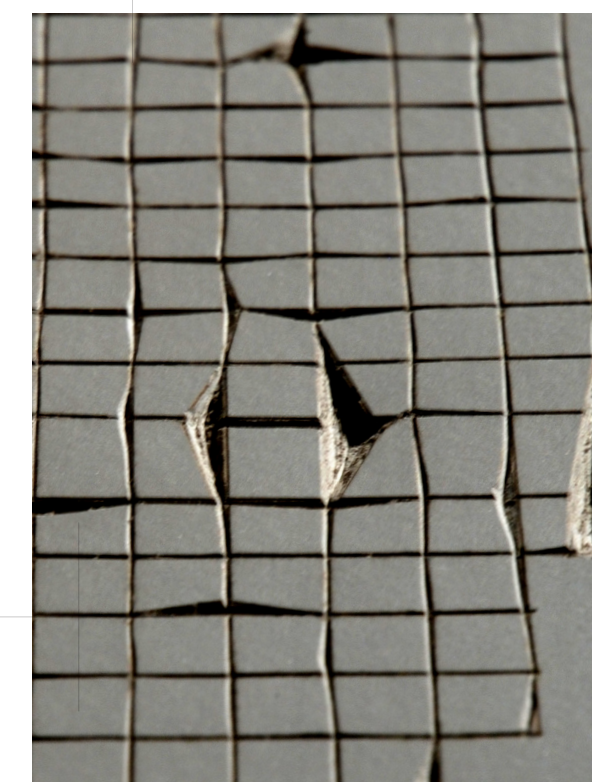


cutting ground

The proposal extends beyond the current design life of the site, a year Z scenario when gas collection is complete and the landfill waste has deteriorated to a safe level. A grid of coppice stands are allowed to overstand. Rather than cutting back, the coppice stands grow out and the roots grow down. These overstood coppice stands, over time, break through the redundant clay cap and begin the long process of re-establishing the below ground layers and flows.



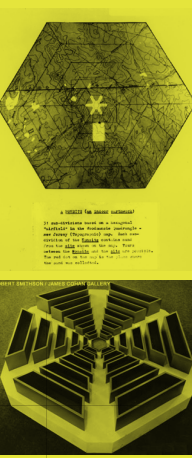
the entropic grid



AN ENTROPIC GRID OF VARIANCE

'By drawing a diagram, a ground plan of a house, a street plan to the location of a site, or a topographic map, one draws a "logical two dimensional picture". A "logical picture" differs from a natural or realistic picture in that it rarely looks like the thing it stands for.'
A Provisional Theory of Non-Sites, Robert Smithson (1968)

Between design and ground there are variances, deviations and gaps. These exist as physical interstices between what is conceptualised and what is realised; and they reveal moments in the design process that resist the reconciliation of people and their environment (McHarg 1963). The Machinist Landscape interrogates the significance of these variances through the contrasting processes of coppice and photovoltaic energy. It builds on the potential of these gaps, and in doing so proposes that these spaces of variance can reveal the complexity of relationships between consumption and remediation, design and nature.



Fresh Kills Park, and in particular the draft master plan (2006), offers a framework to explore this artificial construct. Central to the Machinist Landscape is the analysis of the landfill gas collection system, planned on a notional 200ft grid. Variations are revealed between this diagrammatic grid measure and that which has been constructed on the site. These variances between the abstract and the real offer the Machinist Landscape a powerful space of enquiry. Are these gaps a result of unexpected conditions below ground, topographic nuances or natural phenomena? Does this space of difference, between what is planned and what is constructed, have the potential to redefine the dynamic processes and relations with the land?

The Machinist Landscape is structured through this space of variance with an 'entropic grid', the under-storey of which hosts a carefully managed system of short-rotation coppice (SRC). The coppice, a medieval practice related to energy, product, and space, operates on theoretical and programmatic levels. It is planted along a structure of linear bunds, stabilized through coppice pole retaining structures and enriched with nutrients from coppice produced bio-char. Above the coppice is built an upper-storey of photovoltaic (PV); its structures fabricated from the coppiced timber and the PV produced with graphene from coppice charcoal processes.

CONTEXT OF ART / LANDSCAPE

Rather than solely responding to the many contexts of this landscape the Machinist Landscape engages with them. It interrogates them, draws energy from them, and transforms them. The Machinist Landscape is inspired by Gordon Matta-Clark's artwork, Fresh Kill (1972), which comments on the historic production, consumption, and destruction of the site, stills shown to the right. Inspiration is also drawn from the closed processes created by Dalston Mill (2009) as it recreates Agnes Denes' Wheatfield (1982, image below) and Mel Chin's Revival Field (1990) that explores the contaminated earth in landfill processes.



The Machinist Landscape exists as an artwork and as an art process. It is a place of creative production, including: building (timber), drawing (charcoal), and printing (linocut). Charcoal produced from the coppice will be used in art classes while craft-scale linoleum production will be re-established for lino-cut artwork. Significantly, linoleum, produced using resin from timber, was first produced in the US in Travis (known as Linoleumville until 1930) directly adjacent to Fresh Kills Park.

